

Work Order ID 94306

94306

Page 1

Thursday, December 06, 2012 10:43:43 AM

Item ID: DSI 9635-012

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Roller Bracket Change, RH

Stop

NS2

Start Date: 12/6/2012 Start Qty: 3.00

3

Cust Item ID:

Required Date: 12/21/2012 Req'd Qty: 3.00

3

Customer:

Reference:

Approvals:

Process Plan:

mf

Date:

12-12-07

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run

Start

NR1

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

DSI 9635

PAI A

100

0.00

100

DOCUMENT CONTROL

DC

Memo

0.00

Document Control

Photocopy bluefile & type labels per PPP DSI9635-012 CHG001

110

Pick Kit

0.00

110

Packaging

Memo

0.00

Packaging

120

QC4- 100% Inspect kits for completeness

0.00

120

QC

Memo

0.00

Quality Control

~~PRELIMINARY ISSUE~~ 12-12-18

3 *for ML5* 12-12-17
(3)

3x *SP* 12-12-17

3

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>						
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector			
Doc/Data <input type="checkbox"/>												
Equip/Tooling <input type="checkbox"/>												
Operator <input type="checkbox"/>												
Material <input type="checkbox"/>												
Setup <input type="checkbox"/>												
Other <input type="checkbox"/>												
Process <input type="checkbox"/>												
Supplier <input type="checkbox"/>												
Training <input type="checkbox"/>												
Unapproved <input type="checkbox"/>												
FAULT CATEGORY												
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other	

Work Order ID 94306

94306

Page 2

Thursday, December 06, 2012 10:43:43 AM

Item ID: DSI 9635-012

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Roller Bracket Change, RH

Start Date: 12/6/2012 Start Qty: 3.00 *3*

Cust Item ID:

Required Date: 12/21/2012 Req'd Qty: 3.00 *3*

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130

0.00

130

Packaging

0.00

Packaging

Memo

Packaging

Identify and pack for shipping as per PPP DSI9635-011

Location: _____

140

QC21- Final Inspection - Work Order Release

0.00

140

QC

Memo

Quality Control

0.00

12/12/18

POSITIVE RECALL
EFFECTIVE
RELEASE

12/12/18

MF
12-12-18

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear	General	Other
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete
<input type="checkbox"/> Crushed/Crimped.	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions
		<input type="checkbox"/> Ovalized
		<input type="checkbox"/> Over/Under tolerance
		<input type="checkbox"/> Part Incorrect
		<input type="checkbox"/> Part Lost/Missing
		<input type="checkbox"/> Part Moved
		<input type="checkbox"/> Positioned Wrong
		<input type="checkbox"/> Power Loss/Surge
		<input type="checkbox"/> Pressure/Forced
		<input type="checkbox"/> Temperature/Cure
		<input type="checkbox"/> Weld
		<input type="checkbox"/> Wrong Stock Pulled
		<input type="checkbox"/> Other

Picklist Print

Thursday, December 06, 2012 10:43:43 A

Page 1

Work Order ID: 94306

Parent Item: DSI 9635-012

Parent Item Name: Roller Bracket Change, RH

Start Date: 12/6/2012

Required Date: 12/21/2012

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP REV:A 12.11.29 NEW ISSUE DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4737-041 Bracket Assembly	Smb 3X	Manufactured	No				Each	0.0000					
D4737-044 Bracket Assembly	Smb 3X	Manufactured	No				Each	0.0000					

3 894241 8p
3 894279 8p

12-12-18-

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		
<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-698 REV. E & INSTRUCTIONS FOR
CONTINUED AIRWORTHINESS ICA-D412-698 REV. 5

REF. TCCA STC SH92-43

REF. FAA STC SR01446NY

REF. EASA STC EASA.IM.R.S.00709

1.0 PURPOSE

The purpose of this service instruction is to add the D412-698-111/-112 Cabin Door Roller kits for installation on aircraft equipped with cargo door assembly P/N's 205-031-669-15 (LH) and 205-031-669-16 (RH). Customers who have purchased the D412-698-011/-012 kits can upgrade to D412-698-111/-112 using the DSI 9635-011/-012 kits as follows:

- DSI 9635-011 Roller Bracket Change Kit, LH: converts a D412-698-011 to a D412-698-111;
- DSI 9635-012 Roller Bracket Change Kit, RH: converts a D412-698-012 to a D412-698-112.

2.0 PARTS LISTS

Qty -011	Qty -012	Part Number	Description
X		DSI 9635-011	ROLLER BRACKET CHANGE KIT, LH (TO CONVERT A D412-698-011 KIT)
	X	DSI 9635-012	ROLLER BRACKET CHANGE KIT, RH (TO CONVERT A D412-698-012 KIT)
1	1	D4737-041	BRACKET ASSEMBLY
1		D4737-043	BRACKET ASSEMBLY
	1	D4737-044	BRACKET ASSEMBLY

Qty -111	Qty -112	Part Number	Description
X		D412-698-111	CABIN DOOR ROLLER KIT, LH
	X	D412-698-112	CABIN DOOR ROLLER KIT, RH
3	3	D3121-141	BRACKET ASSEMBLY
1		D3121-143	BRACKET ASSEMBLY
	1	D3121-144	BRACKET ASSEMBLY
9	9	D3199-1	BRACKET
1	1	D3202-1	COVER
1	1	D4737-041	BRACKET ASSEMBLY
1		D4737-043	BRACKET ASSEMBLY
	1	D4737-044	BRACKET ASSEMBLY

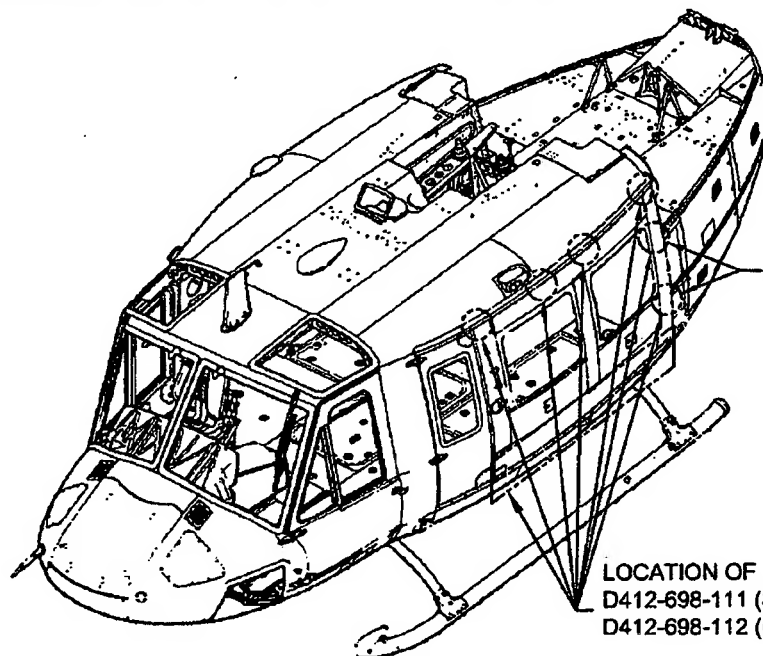
CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 12.11.26
CERT. NO.: SH92-43
ISSUE NO.: 5

A	NEW ISSUE	MB	12.11.21
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9635	SHEET 1 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ROLLER BRACKET CHANGE KIT	NTS
DATE	12.11.21	COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

94306



LOCATION OF
DSI 9635-011 (SHOWN)
DSI 9635-012 (OPPOSITE)

LOCATION OF
D412-698-111 (SHOWN)
D412-698-112 (OPPOSITE)

FIGURE 1 – INSTALLATION OVERVIEW

3.0 INSTALLATION

- 3.1 Remove LH and/or RH sliding doors (ref P/N 205-031-669-15/-16) from the aircraft per the Aircraft Maintenance Manual.
- 3.2 Remove 205-031-436-001 and replace with D3121-141 Bracket (3 places). Reuse existing hardware and shims if determined to be airworthy. Alternatively, if using D412-698-021 Replacement Shim Kit, install D3238-1 & D3238-11 as required. Note that the D3121-141 brackets contain one additional middle slot not used for this installation (see Figure 6 of IIN-D412-698 or Figure 52-8 of ICA-D412-698).
- 3.3 Remove 205-031-435-001/002 and replace with D3121-143 Bracket for left hand doors and D3121-144 Bracket for right hand doors. Reuse existing mounting hardware and shims if determined to be airworthy. Alternatively, if using D412-698-021 Replacement Shim Kit, install D3238-3 & D3238-13 as required. Note that the D3121-143/-144 brackets contain one additional middle slot not used for this installation (see Figure 6 of IIN-D412-698 or Figure 52-8 of ICA-D412-698).
- 3.4 Remove 205-031-433-1 Roller Support (LH) and 205-031-433-2 Roller Support (RH) and replace with D4737-043 on left hand doors and D4737-044 on right hand doors. Reuse existing mounting hardware and shims if determined to be airworthy. Alternatively, if using D412-698-021 Replacement Shim Kit, install D3238-5 & D3238-15 as required.

NOTE: The upper aft door track on early model aircraft may not have been modified to accept the extra roller on the D4737-043/-044 Brackets. If this track has not been modified, it should be modified in accordance with BHT TB 205-99-105 at this time.

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DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)
DATE: 12.11.26
CERT. NO.: SH92-43
ISSUE NO.: 5

DESIGN		DART AEROSPACE LTD	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9635	SHEET 2 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ROLLER BRACKET CHANGE KIT	NTS
DATE	12.11.21	<small>COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

94300

- 3.5 Remove 205-031-434-1 Roller Support and replace with D4737-041. Reuse existing mounting hardware and shims if determined to be airworthy. Alternatively, if using D412-698-021 Replacement Shim Kit, install D3238-5 & D3238-15 as required.
- 3.6 Remove 205-032-669-125 Track (LH) and/or 205-032-669-126 Track (RH) as applicable. Install D3199-1 Brackets and D3202-1 Cover as shown in Figure 2a using existing mounting hardware if determined to be airworthy.
- 3.7 Re-install LH and/or RH doors on the aircraft per the Aircraft Maintenance Manual. Check sliding operation of door. Adjust position/shimming of all new brackets until door operation is smooth and free of dragging/binding through full travel of the door. Once the door is sliding smoothly, torque all fasteners per Aircraft Maintenance Manual.
- NOTE:** To prevent roller wear and premature door track wear, ensure vertical rollers are sitting flush to door tracks.
- 3.8 **NOTE:** It is acceptable to install any portion of the D412-698-111/-112 kits in combination with the existing Bell door components. Replacement parts may be ordered individually as follows:

Bell Part Number	Location	Dart Replacement Part Number	Applicable Instruction
205-031-436-001	STA 162 in STA 140 in STA 116 in	D3121-141	3.2
205-031-435-001	STA 96 in	D3121-143	3.3
205-031-435-002	STA 96 in	D3121-144	3.3
205-031-433-1	STA 168 in	D4737-043	3.4
205-031-433-2	STA 168 in	D4737-044	3.4
205-031-434-1	STA 168 in	D4737-041	3.5

4.0 WEIGHT AND BALANCE

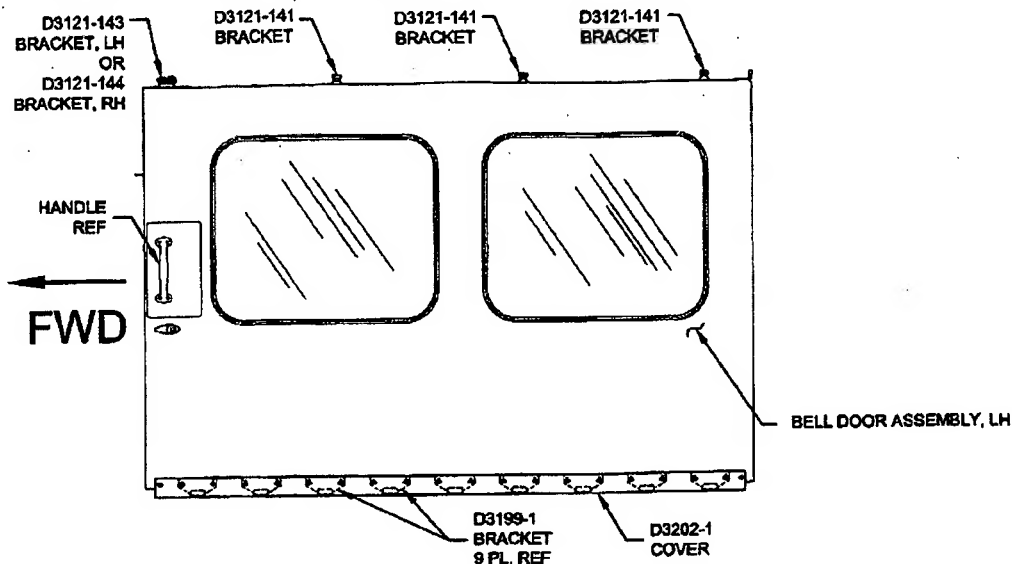
INSTALLATION	WEIGHT	LATERAL		LONGITUDINAL	
		Arm	Moment	Arm	Moment
D412-698-111 Cabin Door	0.82 lb	-48.0 in	-39.4 in lb	130 in	106.6 in lb
Roller Kits (net)	0.37 kg	-1.22 m	-0.45 m kg	3.30 m	1.22 m kg
D412-698-112 Cabin Door	0.82 lb	48.0 in	39.4 in lb	130 in	106.6 in lb
Roller Kits (net)	0.37 kg	1.22 m	0.45 m kg	3.30 m	1.22 m kg
Both D412-698-111/-112 Installed (net)	1.64 lb 0.74 kg	0 in 0 m	0 in lb 0 m kg	130 in 3.30 m	213.2 in lb 2.44 m kg
Replace 205-031-433-1 with D4737-043 (net)	0.19 lb 0.09 kg	-48.0 in -1.22 m	-9.1 in lb -0.11 m kg	168 in 4.27 m	31.9 in lb 0.38 m kg
Replace 205-031-433-2 with D4737-044 (net)	0.19 lb 0.09 kg	48.0 in 1.22 m	9.1 in lb 0.11 m kg	168 in 4.27 m	31.9 in lb 0.38 m kg
Replace 205-031-434-1 with D4737-041 (net)	0.12 lb 0.05 kg	+/-48.0 in +/-1.22 m	+/-5.8 in lb +/-0.06 m kg	168 in 4.27 m	20.2 in lb 0.21 m kg

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DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

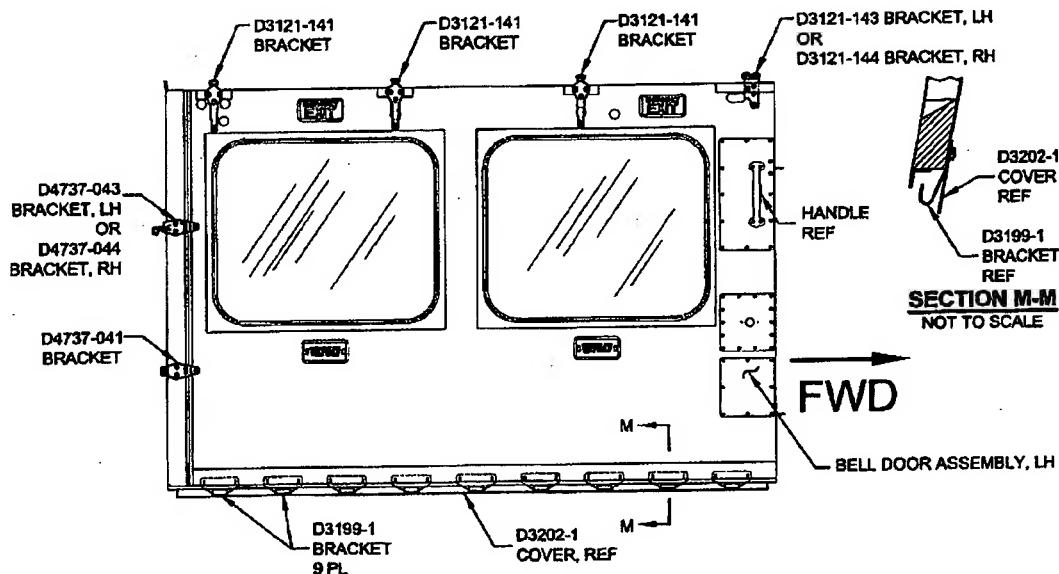
APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)
DATE: 12.11.26
CERT. NO.: SH92-43
ISSUE NO.: 5

DESIGN	<i>[Signature]</i>	DART AEROSPACE LTD	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9635	SHEET 3 OF 5
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	ROLLER BRACKET CHANGE KIT	NTS
DATE	12.11.21	<small>COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

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OUTSIDE VIEW OF LH SLIDING DOOR (LOOKING INBOARD)
(RH DOOR OPPOSITE)



INSIDE VIEW OF LH SLIDING DOOR (LOOKING OUTBOARD)
(RH DOOR OPPOSITE)

FIGURE 2 - MODIFIED SLIDING DOOR
(D412-698-111 SHOWN, D412-698-112 OPPOSITE)

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DAO # 01-O-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 12.11.26
CERT. NO.: SH92-43
ISSUE NO.: 5

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9635	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		ROLLER BRACKET CHANGE KIT	NTS
DATE	12.11.21	<small>COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

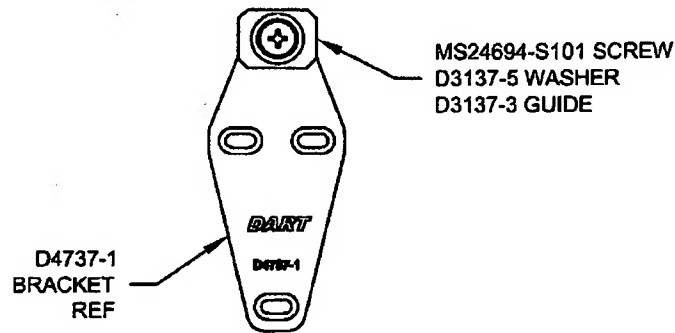
30270

5.0 MAINTENANCE

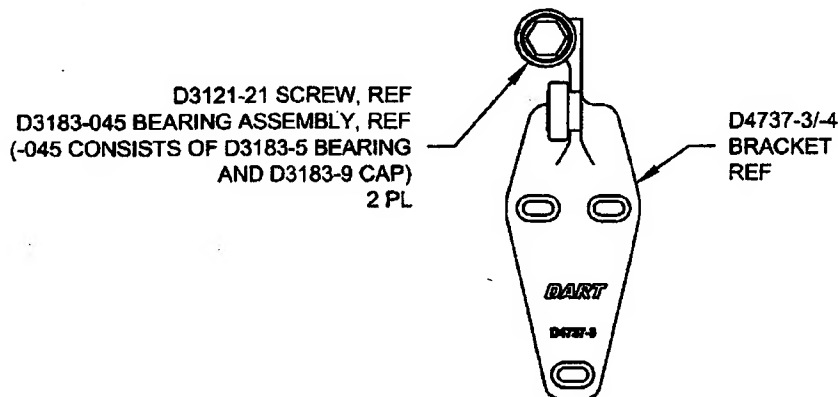
Maintain D412-698-111/-112 in accordance with ICA-D412-698 for the D412-698-011/-012 Kits.

6.0 D4737-041/-043/-044 REPLACEMENT PARTS

For D3121-141/-143/-144 Bracket Assemblies, see Section 5.0 of IIN-D412-698 (Section 52.14 of ICA-D412-698).



D4737-041 BRACKET ASSEMBLY



D4737-043/-044 BRACKET ASSEMBLY

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

APPROVED
BY: *D. Shepherd*
D. SHEPHERD (DE # 02)

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